



PATENT
Attorney Docket No. 030502-0147

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reinhold HOLTKAMP, SR.

Attorney Docket No. 030502-0147

U.S. Application No. 10/046,968

Filing Date: January 17, 2002

Examiner: Wendy C. Haas

Group Art Unit: 1661

Entitled: MULTIFLORESCENCE TRAIT IN AFRICAN VIOLETS

MS APPEAL BRIEF - PATENTS

Commissioner for Patents

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REPLY BRIEF UNDER 37 C.F.R. § 41.41

This paper responds to the Examiner's Answer mailed February 23, 2006, responding to Appellant's appeal under 35 U.S.C. § 134 from the Final Office action mailed December 2, 2004, which rejected claims 1-3 and 5-8. This paper is timely filed within the shortened statutory period set to expire Monday, April 24, 2006.

This paper is accompanied with a Request for Oral Hearing under 37 C.F.R. § 1.194 and the required fee.

Grounds for Rejection:

The Examiner incorporated by reference the Enablement and Written Description rejections set forth in the Final Office Action mailed December 2, 2004. See Examiner's Answer mailed February 23, 2006, page 3, item 9. Claims 1-8 are pending and claim 1-3 and 5-8 are appealed.

A. Enablement: Claims 1-3 and 5-8 remain rejected under 35 U.S.C. § 112, first paragraph, for alleged lack of enablement. The Examiner admitted that the specification is enabling for making and using multiflorescent plants derived from deposited materials, but answered that the specification is non-enabling for making multiflorescent African Violets by any other method.

B. Written Description: Claims 1-3 and 7 remain rejected under 35 U.S.C. § 112, first paragraph, for allegedly lacking written description support. The Examiner answered that the specification discloses only a few specific multiflorescent African Violet plants, and it is impossible to predict whether other African Violets could be developed in the future.

A. Enablement Rejections:

1. **Because the Examiner admitted that Appellant has provided an enabling disclosure to produce multiflorescent African Violets by one method, the full scope of the claims is enabled.**

Claims 1-3 and 5-8 remain rejected under 35 U.S.C. § 112, first paragraph, because while "Appellant has provided an enabling disclosure to produce multiflorescent African Violet plants using 'SB 4-2 Muflo,'" the Examiner answered "Appellant is unable to introduce the mutated multiflorescent trait into a plant by means other than sexual crossing." Examiner's Answer of February 23, 2006, page 4. That is, the Examiner is understood to take the position that the present claims allegedly lack enabling support, because Appellant has not provided *additional* means or mechanisms for producing multiflorescent African Violet plants. However, and as explained below, enablement is satisfied if the description enables *any* mode of making and using the invention. Thus, because Appellant has provided at least one method for producing multiflorescent African Violet plants, and the multiflorescence trait can be stably and reproducibly introgressed into diverse genetic backgrounds, the full scope of the claims is enabled.

Under Section 112, to be "enabling," the specification must teach the skilled artisan how to make and use the claimed invention. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1561, 19 U.S.P.Q.2d 1111 (Fed. Cir. 1991). While "tossing out the mere germ of an idea does not constitute enabling disclosure," *Genentech, Inc. v. Novo Nordisk, A/S*, 108 F.3d 1361, 1366, 42 U.S.P.Q.2d 1001 (Fed. Cir. 1997), the disclosure of any mode of making and using the invention is sufficient to satisfy the enablement requirement.

That is, the law makes clear that the specification need teach only one mode of making and using a claimed invention. *Engel Indus. Inc. v. Lockformer Co.*, 946 F.2d 1528, 1533, 20 U.S.P.Q.2d 1300 (Fed. Cir. 1991). See also *Johns Hopkins Univ. v. Cellpro, Inc.*, 152 F.3d 1342, 1361, 47 U.S.P.Q.2d 1705 (Fed. Cir. 1998) (holding that the enablement requirement is met if the description enables any mode of making and using the invention); *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 126 F. Supp. 2d 69, 57 U.S.P.Q.2d 1449 (D. Mass. 2001) (holding that there is no requirement that the specification enable every mode for making and using the claimed products).

Consequently, and contrary to the Examiner's answer, there is no requirement that the specification enable every possible mode for making the claimed invention, including after-arising technology. Thus, the Examiner's answer that (1) Appellant has not taught how to reproduce the induction of the multiflorescence mutation by mutagenesis; and (2) Appellant has not isolated the multiflorescence gene for insertion into an African Violet, are wholly immaterial because the claims embrace a product and methods for making same, which the Examiner admitted may be made by at least one method. As enumerated by the Federal Circuit, enablement is met if the description enables any mode of making and using the invention.

As Examiner Haas acknowledged, the specification enables multiflorescent African Violet breeding material and methods for producing new multiflorescent varieties. For example, and acknowledged by the Examiner, multiflorescence African Violet plants can be produced from American Type Culture Collection (ATCC) seed deposit PTA-3982. See Appeal Brief, Exhibit A. Alternatively, the specification

discloses crossing ‘SB 4-2 Muflo’ with non-multiflorescence African Violet cultivars to produce new cultivars exhibiting the desired multiflorescence trait. Specification, page 14, lines 10-14. Contrary to the Examiner’s allegation that ‘SB 4-2 Muflo’ is required to practice the invention, the specification at page 13, lines 10-23, makes clear “any African Violet selection carrying the multiflorescence trait could be substituted for ‘SB 4-2 Muflo’ as parent breeding material.” Thus, because Appellant has provided at least one means for producing multiflorescence African Violets, Appellant has satisfied the Section 112 enablement requirement.

Furthermore, and as exemplified throughout the specification and the record, the specification enables the skilled artisan to predictably and reproducibly introgress the multiflorescent trait into diverse African Violet genetic backgrounds. See, for example, Appeal Brief filed September 2, 2005, pages 12-15. Therefore, because the specification has taught those skilled in the art at least one method of making and using the claimed invention, the specification has fulfilled the enablement requirement and the rejection should be reversed.

2. After-arising technology is immaterial to enablement.

The PTO routinely grants utility patents embracing new plant traits or phenotypes. In *J.E.M. AG Supply v. Pioneer Hi-Bred Intern.*, 534 U.S. 124 (2001), the Supreme Court affirmed that newly developed plant breeds are patentable subject matter. Yet the Examiner seems reluctant to withdraw the present rejections because the claims embrace a new African Violet plant, namely, a multiflorescent African Violet. In doing so, the Examiner answered “the appealable claims are directed toward any multiflorescent African Violet plant. Consequently, they would dominate any African Violet plants unrelated to ‘SB 4-2 Muflo’ that display a multiflorescence.” Examiner’s Answer, page 8.

The Examiner is understood to maintain her rejection because “after-arising” technology may produce another method for developing multiflorescent African Violets. Yet after-rising technology is irrelevant to patentability, because patentability is assessed as of the *filings date*, not during patent term. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 19 U.S.P.Q.2d 1111 (Fed. Cir. 1991).

For example, in *In re Hogan*, 559 F.2d 595, 194 U.S.P.Q. 527 (CCPA 1977), the PTO rejected claims for lack of enablement after concluding that, in view of after-arising technology, the claims were broad enough to embrace certain after-arising embodiments that were not enabled by the application. The Court of Customs and Patent Appeals reversed the PTO, holding that it was enough that the application enabled the claims as construed in light of the state of the art at the time of filing. *Hogan*, 559 F.2d at 606; 194 U.S.P.Q. at 540. As the court explained, “the use of a subsequently-existing

improvement to show lack of enablement in an earlier-filed application on the basic invention would preclude issuance of a patent to the inventor of the thing improved, and in the case of issued patents, would invalidate all claims ... therein." *Hogan*, 559 F.2d at 606, 194 U.S.P.Q. at 538.

In the present case, the Examiner attempts to revive the PTO's improper position in *Hogan*. This attempt is most certainly as improper now as it was at the time of *Hogan*, and the rejection should be reversed.

B. Written Description Rejections:

1. Because Appellant possesses all known multiflorescence African Violets, Appellant possesses the full scope of claimed invention.

Claims 1-3 and 7 remain rejected under 35 U.S.C. § 112, first paragraph, because allegedly “while the specification provides written support for multiflorescent African Violet plants derived from the one reproducible mutation disclosed, it does not provide support for the broad claims to all multiflorescent African Violet plants.” Examiner’s Answer, page 9. That is, the Examiner maintains her rejection because “Appellant has not shown possession of every possible multiflorescent African Violet cultivar, as claimed.” *Id.* at page 11. In other words, the Examiner is understood to take the position that the specification lacks written description because “Appellant has shown possession of only SB 4-2 Muflo and its progeny, rather than all multiflorescent African Violets having this particular characteristic.” *Id.* at page 13.

Under Section 112, a patent application would satisfy the written description requirement if persons of ordinary skill in art at the time application was filed would recognize that the inventor possessed the full scope of the claimed invention.

By requiring Appellant to possess “all multiflorescent African Violets having this particular characteristic,” the Examiner answer suggests that there are other known multiflorescent African Violets. Yet the Examiner admits that her search of the art reveals no other multiflorescent African Violet plants. See Final Office Action mailed December 2, 2004, page 6. Because the record reflects that neither the Examiner nor Appellant is aware of any art disclosing a multiflorescent African Violet plant, Appellant believes that at the time of filing he possessed all known multiflorescent African Violet

cultivars. Thus, for this reason alone, Appellant has satisfied the Examiner's "requirement" that Appellant possess "all multiflorescent African Violets having this particular characteristic."

2. The multiflorescent phenotype is described.

The Examiner maintains her rejection that the multiflorescent phenotype is not described because "Appellant provides no description of the genetic character of the mutations obtained. Appellant does not describe whether the mutation arose at one loci, or multiple loci. Appellant does not provide whether or not each mutated multiflorescent cultivar has not mutated at the same location(s) and does not specify whether or not each mutated multiflorescent cultivar displays additional mutations that might affect the expression of the multiflorescent trait." Examiner's Answer, pages 10-11.

While the Examiner confuses the requirements for enablement and written description, it seems the Examiner bases her rejection on the alleged lack of a defined genetic mechanism underlying the multiflorescent phenotype. While the patent specification must describe an invention in sufficient detail that one skilled in the art can clearly conclude that the inventor invented what is claimed, the Federal Circuit has affirmed applicant need not disclose the general principles underlying his claimed invention. See *Fromson v. Advance Offset Plate, Inc.*, 720 F.2d 1565, 1570, 219 U.S.P.Q. 1137, 1140 (Fed. Cir. 1983) (holding inventor's theory and belief about how his invention operates is unnecessary to meet the enablement requirement of § 112); *In Re Cortright*, 165 F.3d 1353 (Fed. Cir. 1999) (holding that it is not a requirement of

patentability that an inventor correctly set forth, or even know, how or why the invention works).

Applying these cases to the present invention, it is clear that Appellant need not proffer a detailed characterization of the genetic mutation, since the claims embrace a discernible floral structure. Thus, the Examiner's allegations that "Appellant has not characterized the allele in any fashion, has not established whether the trait is dominant or not, and has not so much as discovered whether the trait is single or the result of multiple genes" are wholly immaterial. Examiner's Answer, pages 11-12.

Here, the specification provides written support for the claimed invention because it discloses how to make, use, and identify a multiflorescent African Violet. Appellant need not proffer a detailed characterization of the genetic mutation, since the claims embrace a discernible floral structure.

As enumerated in Appellant's Appeal Brief, the specification provides written support for the claimed multiflorescence African Violet plant. For example, the as-filed specification makes clear that African Violet plants expressing the multiflorescence trait have at least one leaf axil with more than one flower stem. Specification, page 7, lines 10-12. The specification provides numerous examples describing the claimed multiflorescence phenotype (see, for instance, Example 1) and methods for producing an African Violet plant expressing the claimed phenotype (see, *inter alia*, Example 2 and Figures 7-8). Thus, the specification provides written support for the claimed invention.

Despite the fact that the specification provides written support for predictably and stably introgressing the multiflorescence trait into diverse African Violet genetic

backgrounds, the Examiner answers “it appears that a skilled plant breeder would similarly be unable to predict the percentage of multiflorescent African Violets arising from crosses with ‘SB 4-2 Muflo,’ and its progeny.” Examiner’s Answer, page 12. Yet the Examiner’s answer bears no merit because there is no statutory requirement that an invention operate at a specified efficiency or predictable percentage. Analogous to a chemical reaction, the reaction need not progress at a certain rate or yield a specified quantity to be patentable. The sheer fact that Appellant has demonstrated that the multiflorescent trait can be stably and reproducibly introgressed into diverse genetic African Violet backgrounds is sufficient for patentability. Using the plant materials and methods described in the specification, a skilled plant breeder would clearly understand that Appellant possessed the claimed invention at the time of filing.

For at least these reasons, the Examiner’s written description rejection is improper and should be reversed.

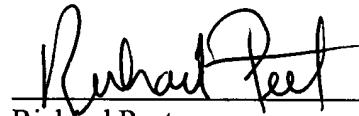
CONCLUSION

Wherefore, Appellant prays that the Honorable Board reverse the outstanding final rejection.

April 24, 2006
Date

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Respectfully submitted,



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